|  | Application No.                          | Application No. Applicant(s)             |             |  |
|--|--|--|-------------|--|
| Notice of Allowability   | 10/517,840                               | MURAI, MASAMI                            |             |  |
|  | Examiner                                 | Art Unit                                 |             |  |
|  | Thao P. Le                               | 2818                                     |             |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. |  |  |             |  |
| 1. This communication is responsive to <u>4/26/2007</u> .  |  |  |             |  |
| 2. The allowed claim(s) is/are 13-18.  |  |  |             |  |
| <ul> <li>3.  Acknowledgment is made of a claim for foreign priority ur</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> <li>3.  Copies of the certified copies of the priority documents</li> </ul>  | been received. been received in Applicat | ion No                                   | on from the |  |
| International Bureau (PCT Rule 17.2(a)).   |  |  |             |  |
| * Certified copies not received:   |  |  |             |  |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.   |  |  |             |  |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.   |  |  |             |  |
| 5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  |  |  |             |  |
| (a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached   |  |  |             |  |
| 1) 🗌 hereto or 2) 🗍 to Paper No./Mail Date   |  |  |             |  |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of<br>Paper No./Mail Date  |  |  |             |  |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).  |  |  |             |  |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.  |  |  |             |  |
|  |  |  |             |  |
| Attachment(s)  |  |  |             |  |
| 1. Notice of References Cited (PTO-892)  |  | nformal Patent Application               |             |  |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948)   | Paper No                                 | ew Summary (PTO-413),<br>r No./Mail Date |             |  |
| Information Disclosure Statements (PTO/SB/08),     Paper No./Mail Date   | 7. Examiner's Amendment/Comment          |  |             |  |
| Examiner's Comment Regarding Requirement for Deposit of Biological Material  | 8. 🛭 Examiner's                          | s Statement of Reasons for Allov         | vance       |  |
| ha ?   | 9. ☐ Other                               | _  |             |  |

## **DETAILED ACTION**

## Response to Amendment

This Office Action is in response to Amendment filed on 04/26/2007.

Claims 1-12 have been cancelled.

Claims 13-15 have been amended.

Claims 13-18 are pending.

Abstract and specification have been amended.

## Reason for allowance

Claims 13-18 are allowed. The following is an examiner's statement of reason for allowance: None of the references of record teaches or suggests the claimed limitations having a piezoelectric element comprising, among other limitations cited in independent claim 13, a piezoelectric film formed on a lower electrode wherein the piezoelectric film includes a lower layer portion having column crystals, and an upper layer portion having column crystals which are continuous from the column crystals in the lower layer portion and having sizes larger than the column crystals in the lower layer portion.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao P. Le whose telephone number is 571-272-1785. The examiner can normally be reached on M-F (8-6).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Steven H. Loke can be reached on 571-272-1657. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thao P. Le

Primary Examiner

June 24, 2007.